

# **Report on Disaster Recovery and Business Continuity**



**Michael F. Easley**  
**Governor**

**George Bakolia**  
**State Chief Information Officer**

**December 2008**

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## State of North Carolina Office of Information Technology Services

Michael F. Easley, Governor

George Bakolia, State Chief Information Officer

December 1, 2008

The Honorable Vernon Malone  
The Honorable Joe Tolson  
Chairs, Joint Legislative Oversight Committee on Information Technology  
N.C. General Assembly  
Raleigh, N.C.

Dear Sen. Malone and Rep. Tolson:

As State Chief Information Officer, I submit for your review an assessment of executive branch agency critical applications without adequate backup, as directed by the 2008 session of the N.C. General Assembly.

Improving the State's ability to identify, classify and adequately back up applications that sustain critical services to our citizens has been a goal of North Carolina for many years. The funding for construction of a second data center is evidence of the State's commitment to this goal.

This report shows that with the addition of the Western Data Center and improvements in technology, and by greater use of an enterprise approach, we can achieve our goal. I am convinced that an investment in enterprise business continuity planning and services for critical applications would efficiently and effectively maximize the use of both of the State's Data Centers and pay dividends to the State and its citizens for many years to come.

Thank you for your support of our efforts to improve the use of information technology in the delivery of sustainable services to North Carolina.

Sincerely,

A handwritten signature in cursive script, appearing to read "George Bakolia".

George Bakolia

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## Introduction

The purpose of Business Continuity Planning is ensuring that critical business functions will be available to customers, suppliers, and others with minimal disruption. Business Continuity is not something implemented at the time of a disaster, but is done on a daily basis to maintain service, consistency, and recoverability.

Given the emphasis on homeland security and confidentiality of data, it is more important than ever for agencies to maintain updated Business Continuity Plans (BCPs) for delivering critical services to the citizens of the State of North Carolina. Having access to this information increases our ability to respond to and recover quickly from any disruption or emergency.

Policies and procedures are the foundation of Business Continuity. Without them, State agencies cannot ensure that adequate resources and supporting information technology, including adequate backup, are available to sustain or recover critical business functions.

The N.C. General Assembly, in Section 6.10 of Session Law 2008-107, directed the State Chief Information Officer to report on the number of critical State applications without adequate backup, the agencies utilizing those applications and the plans for providing adequate backup.

As a next step, the State CIO, in conjunction with the agencies and the Office of State Budget and Management, will develop more detailed plans for utilizing the Western Data Center to provide adequate backup for the most critical applications. Given the State's budget forecast, the detailed plan must call for a phased approach that prioritizes applications.

## Approach

In developing this report, the first step was to identify existing sources of information about critical applications that could be collected and analyzed.

Agency Business Continuity Plans (BCPs) collected in June 2008 were initially targeted as the data source. BCPs focus primarily on processes, however, and may or may not include a comprehensive list of supporting applications.

The Application Portfolio Management (APM) tool is the primary source for storing information on agency applications, with data on more than 1,424 applications that is updated regularly. To collect data for this report, the following fields were added to the tool this year. The terms are defined later in the report.

**Adequate Offsite Backup and Restore Capability** (List, choices: Yes or No) – Can the Application's Recovery Time Objective (RTO) and Recovery Point Objective (RPO) be achieved using the selected provision for DR/BCP processing?

**Estimate Resources/Cost Needed to Implement Adequate Recovery** (List, choices: \$0-\$10,000, \$10,000-\$50,000, \$50,000-\$100,000, > \$100,000) - If answer to the question 'Adequate Offsite Backup and Restore Capability' is 'yes', do not answer this question.

If the answer is 'No', estimate the cost of implementing adequate offsite backup and restore capability for this application.

**Justification of Estimate of Additional Resources** (Text) Briefly discuss the types of resources required (Ex. people, hardware, software, etc.) in Estimate Resources/Cost Needed to Implement Adequate Recovery.

**Date (time frame) of Last Successful Disaster Recovery Test** (List, choices: Never Tested, Tested - Unsuccessful recovery, before 2007, 2007, 2008) When was the most recent successful disaster recovery test for this application?

**Criticality Rating** – A value from one to four assigned to each application based on the level of impact resulting from a disruption to the application. The rating also drives the priority of recovery (e.g., 4 – Statewide, 3 – Department, 2 – Program, 1- Non Critical).

The Enterprise Security and Risk Management Office (ESRMO) hosted two information sharing sessions with agency CIOs and Business Continuity Plan Administrators to discuss the development of this report.

As part of this effort, the Statewide Glossary of Information Technology (IT) Terms and sections of the Statewide Security Manual were clarified. The definition of “backup” was revised as follows.

**Backup** - The process of duplicating data stored on a computer's hard disk to another storage medium for the purpose of system and/or data restoration to its original state following a disaster or other inadvertent loss. Backup may also refer to alternative processing capabilities through secondary systems.

The following relevant BCP terms were also added to the glossary.

**Critical Data Point** – See Recovery Point Objective.

**Recovery Point Objective (RPO)** - The point in time to which systems and data must be recovered following an adverse event, *e.g.* the last completed transaction or the point immediately before the last backup commences. Also known as the Critical Data Point.

**Recovery Time Actual (RTA)** - The timeframe that technology support staff actually takes to deliver the recovered infrastructure to the business. The RTA is usually determined during tests.

**Recovery Time Objective (RTO)** – The duration of time and a service level within which systems, applications, or functions must be restored after an outage to the predetermined Recovery Point Objective (RPO), for example, one business day.

In addition, the Security Manual was amended to require consistency in formal agency reports.

## Summary of Assessment

The table below summarizes the assessment by application criticality rating and estimated costs to implement adequate backup. Criticality is divided into three categories: statewide, or critical to all of state government; department, or critical to a department; and program, critical to a specific program. The data was reported by the agencies and has not been verified.

Table 1

	Total # of Apps by Criticality Rating	# of Apps Without adequate backup	% of Apps Without adequate backup	Total # of Apps Never tested	% of Apps Never tested	Cost to Implement Adequate Backup (Mid-point)	Cost to Implement Adequate Backup (High end)
4 - Statewide	236	60	25%	116	49%	\$ 680,003.00	\$1,360,006.00
3 - Department	348	94	27%	154	44%	\$ 970,003.50	\$1,940,007.00
2 - Program	463	173	37%	227	49%	\$ 955,001.50	\$1,910,003.00
Totals	1047	327	31%	497	47%	\$2,605,008.00	\$5,210,016.00

## Observations

- Agencies identified 1,047 critical applications; 327 of those do not have adequate backup.
- While agencies reported that only 25% of statewide critical applications, 27% of department critical applications and 37% of program critical applications have insufficient backup, they also reported that 49%, 44% and 49% respectively, of the total applications, have never completed a successful BCP/DR test. This is an inconsistent response. It is difficult to validate that backup is adequate without regular testing.
- In this analysis, blank responses are considered a “No” response; therefore, the number of applications never tested, in the table above, is the sum of untested applications, applications with a blank test date and those with no successful test.
- Agencies were asked to estimate the cost to implement sufficient backup for each of their applications using the following tiers as guidelines: Number of applications that would cost up to \$10,000 to provide adequate backup (Tier 1); \$10,000-\$50,000 (Tier 2), \$50,000-\$100,000 (Tier 3) and more than \$100,000 (Tier 4).
- The total dollar amount for each tier was then calculated by multiplying the number of applications in each tier by both the mid-point and the high end of the range. The total dollar amounts in the table do not reflect costs for applications (~16%) where the dollar estimates were not provided. Thus, the total dollar amounts are estimates.
- The agencies estimated the cost to implement adequate backup is \$2.6 million at the midpoint up to \$5.2 million at the high end.

Note: Details of the summary data in Table 1, including a breakdown by agency, are in Appendix 3 (A-E).

## Recommendations

The State should continue to expand the enterprise approach for IT business continuity planning to maximize the use of its two data centers and to prevent or minimize any disruption of critical applications during natural or manmade disasters. Detailed recommendations are listed below.

### **Recommendation: Improve, standardize and centrally manage business continuity planning tools.**

During the assessment of the State's critical applications, the need for better tools and data collection standardization could not have been more evident. Several excellent data sources were identified as candidates for the study; however, each focused on different components, making a comparison of data elements nearly impossible. Implementing an enterprise approach will ensure that more accurate and consistent data is collected and utilized to develop viable plans that truly represent a statewide view.

This year the State has expanded its enterprise approach to Business Continuity Planning by mandating the use of a common tool to develop IT business continuity and disaster recovery plans. Recently the State purchased a web-based version of the SunGard / Strohl Systems Living Disaster Recovery Planning System (LDRPS) application software. The scalability of this software gives the State the ability to standardize and share the same business continuity planning methodology with all State departments and divisions. ESRMO is currently managing a project to identify an enterprise approach to using these planning tools to collect more meaningful data.

In addition, it has been determined that by consolidating 30 different agency-based LDRPS software licenses hosted independently on 60 to 90 servers into a single enterprise license hosted at ITS, and by adding one additional staff person, the State will save more than \$500,000 over a three-year period.

### **Recommendation: Use the data from enterprise business continuity planning tools to help identify common gaps in BCPs for the recovery of critical applications.**

The agency data and reporting will be standardized, enabling 'an apples-to-apples' comparison of agency business continuity plans. Roll-up reporting can be designed for an overall statewide view. This will make it easier to analyze potential plan gaps and to identify opportunities for cost savings across all agencies.



As the State continues to implement centralized management tools (APM, IT Asset Management, BEACON, etc.) opportunities to share data relevant data can be identified to enhance agency BCPs.

**Recommendation: Identify critical dependencies and plan for adequate support infrastructure.**

The number of factors a continuity plan must account for is staggering. Even the most complete continuity plans can suffer if one process is not properly prioritized, creating a chain effect that can seriously impact an organization's downtime. Understanding the relationships between BCP elements, specifically processes, applications and hardware, and how each element depends on another, greatly reduces the likelihood of leaving important contingencies out of a plan. It also avoids issues caused by overlapping priorities, over-allocation of resources and under utilization of space. This approach will provide better integration and capability to roll up agency BCPs.

Once agencies have identified critical application dependencies using the new planning tools, ITS Operations can use these dependency maps to plan to provide adequate infrastructure support services. For example the network, Internet access and the hosting environment need to be restored before a critical web-based application can be restored. Currently this infrastructure order is known only at the highest level. The more intricate dependency relationships for each individual critical application are not fully documented and therefore increase service restoration risk.

**Recommendation: Obtain Critical Infrastructure / Key Resource designation for the WDC from US Department of Homeland Security. Retain designation for the EDC.**

Request Critical Infrastructure / Key Resource (CIKR) designation from the U.S. Department of Homeland Security for the new Western Data Center in Rutherford County and retain certification for the Eastern Data Center in Raleigh during the FY 2009. This federal designation provides priority focus and additional security measures during times of crises and emergencies, and qualifies the site for potential grant funding which can be used for physical security measures.

**Recommendation: Provide agencies with the opportunity to conduct both informal and formal business continuity tests and maintain records of agency critical application BCP tests.**

Conducting tests of continuity plans, both scheduled and unscheduled, is the only way to ensure adequate backup exists for the State's critical applications. Before the establishment of the Western Data Center, business continuity and disaster recovery testing was comparable to a trip abroad: elaborate, planned well in advance, expensive and over all too quickly. Business continuity testing was conducted only twice a year at the vendor's out-of-state testing facility.

Much effort was compressed into two short testing windows. Consequently many critical applications have never been adequately tested.

Now, with two State data centers, agency business continuity testing can be both planned and ad hoc, allowing the State to optimize the use of both facilities. Agency staff should be encouraged to test critical applications more often, ideally on a minimum yearly schedule, and to use technology such as teleworking to test their ability to recover applications from offsite locations. Agency tests will be far more cost-effective and more realistic of true emergency situations.

ITS Operations should continue providing at least two formal, planned agency testing opportunities each year. ITS Operations should develop procedures to allow agencies to test their critical applications on an individual basis outside the formal test windows.

ITS also should implement a formal communication and data collection process to track agency critical application testing efforts. This will enable ITS Operations to use agency BCP test data and results to improve the overarching ITS BCP plan to better meet critical application infrastructure dependencies and restoration support needs.

## Conclusion

An enterprise approach to agency business continuity planning for backing up the State's critical applications helps the State effectively use both data centers. Using better business continuity planning tools helps agencies to identify and capture data about their critical systems, including their dependencies.

The cost of implementing adequate backup could be reduced significantly if assets were managed at the enterprise level, eliminating duplication of effort. Leveraging this knowledge at the enterprise level for optimal use of both State data centers, agencies can plan better, test more, and therefore greatly improve their ability to ensure adequate backup for critical systems serving our State's citizens.

## Appendix 1

### **G.S. § 147-33.89. Business Continuity Planning**

(a) Each State agency shall develop and continually review and update as necessary a business and disaster recovery plan with respect to information technology. Each agency shall establish a disaster recovery planning team to develop the disaster recovery plan and to administer implementation of the plan. In developing the plan, the disaster recovery planning team shall do all of the following:

(1) Consider the organizational, managerial, and technical environments in which the disaster recovery plan must be implemented.

(2) Assess the types and likely parameters of disasters most likely to occur and the resultant impacts on the agency's ability to perform its mission.

(3) List protective measures to be implemented in anticipation of a natural or man-made disaster.

(b) Each State agency shall submit its disaster recovery plan on an annual basis to the State Chief Information Officer. (2003-153, s. 2; 2004-129, s. 21.)

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**IMPROVE DISASTER RECOVERY AND BUSINESS CONTINUITY**

**SECTION 6.10. (a)** The State Chief Information Officer (CIO) shall utilize the business and disaster recovery plans submitted under G.S. 147-33.89 and any other information at the CIO's disposal to determine whether State agencies have made adequate preparations for backing up critical applications.

**SECTION 6.10. (b)** In cases where backup is not sufficient to minimize any disruptions in critical State services caused by natural or man-made disasters, the State CIO, in conjunction with the agencies and the Office of State Budget and Management, shall develop plans to utilize the Western Data Center for providing backup.

**SECTION 6.10. (c)** By December 1, 2008, the State CIO shall report to the Joint Legislative Oversight Committee on Information Technology on the number of critical State applications without adequate backup, the State agencies utilizing the applications, and the plans for providing adequate backup.

**SECTION 6.10. (d)** This section does not apply to the General Assembly, to the Judicial Department, or to The University of North Carolina and its constituent institutions.

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Appendix 3 (A)  
Count of Applications by Agency and Criticality Rating

Agency	Number of Applications	Retired Applications	Active Applications	Criticality Rating Not Provided (blank)	1- Non Critical	2 - Program Critical	3 - Department Critical	4 - Statewide Critical
Administration, Department of	65	15	50	0	1	17	11	21
Administrative Hearings, Office of	3	0	3	0	0	1	0	2
Agriculture and Consumer Services, Department of	85	5	80	3	12	59	3	3
Alcoholic Beverage Control Commission	5	0	5	0	0	2	3	0
Auditor, Office of the State	8	1	7	0	1	0	6	0
Budget and Management, Office of State	9	1	8	0	0	7	1	0
Commerce, Department of	28	3	25	0	3	7	15	0
Controller, Office of the State	11	0	11	0	0	1	1	9
Correction, Department of	32	5	27	0	4	15	8	0
Crime Control and Public Safety, Department of	82	2	80	1	10	23	32	14
Cultural Resources, Department of	39	13	26	0	4	12	5	5
Employment Security Commission	20	2	18	0	3	0	9	6
Environment and Natural Resources, Department of	216	8	208	12	53	93	20	30
Health and Human Services, Department of	255	13	242	0	10	131	61	40
Industrial Commission - Workers' Compensation	10	0	10	4	0	2	1	3
Information Technology Services, Office of	29	1	28	4	5	3	8	8
Insurance, Department of	18	2	16	0	4	1	8	3
Justice, Department of	101	8	93	0	19	15	47	12
Juvenile Justice and Delinquency Prevention, Department of	13	6	7	0	3	1	3	0
Labor, Department of	7	0	7	0	0	0	7	0
North Carolina Community Colleges	6	1	5	0	0	0	4	1
Personnel, Office of State	1	1	0	0	0	0	0	0
Public Instruction, Department of	129	23	106	5	15	12	42	32
Revenue, Department of	15	0	15	0	2	5	8	0
Secretary of State, Department of the	4	1	3	0	0	0	3	0
State Board of Elections	8	3	5	0	0	0	0	5
Transportation, Department of	189	25	164	3	34	52	36	39
Treasurer, Department of the State	32	18	14	0	5	4	2	3
Wildlife Resources Commission	4	0	4	0	0	0	4	0
<b>State Totals:</b>	<b>1424</b>	<b>157</b>	<b>1267</b>	<b>32</b>	<b>188</b>	<b>463</b>	<b>348</b>	<b>236</b>

Appendix 3 (B)  
Count of Applications Without Adequate Backup

Agency	2 - Program Critical #	% Program Critical	3 - Department Critical #	% Department	4 - Statewide Critical #	% Statewide Critical
Administration, Department of	15	88%	8	73%	13	62%
Administrative Hearings, Office of	0	0%	0	N/A	0	0%
Agriculture and Consumer Services, Department of	0	0%	0	0%	0	0%
Alcoholic Beverage Control Commission	0	0%	0	0%	0	N/A
Auditor, Office of the State	0	N/A	5	83%	0	N/A
Budget and Management, Office of State	0	0%	0	0%	0	N/A
Commerce, Department of	2	29%	3	20%	0	N/A
Controller, Office of the State	0	0%	0	0%	0	0%
Correction, Department of	1	7%	2	25%	0	N/A
Crime Control and Public Safety, Department of	18	78%	9	28%	10	71%
Cultural Resources, Department of	12	100%	5	100%	4	80%
Employment Security Commission	0	N/A	0	0%	0	0%
Environment and Natural Resources, Department of	67	72%	11	55%	10	33%
Health and Human Services, Department of	12	9%	6	10%	5	13%
Industrial Commission - Workers' Compensation	0	0%	0	0%	2	67%
Information Technology Services, Office of	0	0%	4	50%	2	25%
Insurance, Department of	0	0%	0	0%	0	0%
Justice, Department of	0	0%	0	0%	0	0%
Juvenile Justice and Delinquency Prevention, Department of	0	0%	0	0%	0	N/A
Labor, Department of	0	N/A	6	86%	0	N/A
North Carolina Community Colleges	0	N/A	0	0%	0	0%
Personnel, Office of State	0	N/A	0	N/A	0	N/A
Public Instruction, Department of	6	50%	19	45%	8	25%
Revenue, Department of	5	100%	6	75%	0	N/A
Secretary of State, Department of the	0	N/A	0	0%	0	N/A
State Board of Elections	0	N/A	0	N/A	0	0%
Transportation, Department of	35	67%	10	28%	6	15%
Treasurer, Department of the State	0	0%	0	0%	0	0%
Wildlife Resources Commission	0	N/A	0	0%	0	N/A
<b>State Totals:</b>	<b>173</b>	<b>37%</b>	<b>94</b>	<b>27%</b>	<b>60</b>	<b>25%</b>



Appendix 3 (C)  
Count of Applications with BCPs Never Tested

Agency	2 - Program Critical #	% Program Critical	3 - Department Critical #	% Department Critical	4 - Statewide Critical #	% Statewide Critical
Administration, Department of	17	100%	11	100%	21	100%
Administrative Hearings, Office of	0	0%	0	N/A	0	0%
Agriculture and Consumer Services, Department of	44	75%	3	100%	1	33%
Alcoholic Beverage Control Commission	0	0%	0	0%	0	N/A
Auditor, Office of the State	0	N/A	0	0%	0	N/A
Budget and Management, Office of State	2	29%	0	0%	0	N/A
Commerce, Department of	4	57%	4	27%	0	N/A
Controller, Office of the State	0	0%	0	0%	0	0%
Correction, Department of	9	60%	4	50%	0	N/A
Crime Control and Public Safety, Department of	16	70%	12	38%	10	71%
Cultural Resources, Department of	12	100%	5	100%	5	100%
Employment Security Commission	0	N/A	1	11%	2	33%
Environment and Natural Resources, Department of	31	33%	4	20%	11	37%
Health and Human Services, Department of	27	21%	31	51%	9	23%
Industrial Commission - Workers' Compensation	0	0%	0	0%	2	67%
Information Technology Services, Office of	3	100%	2	25%	3	38%
Insurance, Department of	1	100%	8	100%	3	100%
Justice, Department of	0	0%	1	2%	0	0%
Juvenile Justice and Delinquency Prevention, Department of	0	0%	2	67%	0	N/A
Labor, Department of	0	N/A	6	86%	0	N/A
North Carolina Community Colleges	0	N/A	0	0%	0	0%
Personnel, Office of State	0	N/A	0	N/A	0	N/A
Public Instruction, Department of	12	100%	41	98%	29	91%
Revenue, Department of	5	100%	6	75%	0	N/A
Secretary of State, Department of the	0	N/A	0	0%	0	N/A
State Board of Elections	0	N/A	0	N/A	3	60%
Transportation, Department of	42	81%	13	36%	17	44%
Treasurer, Department of the State	2	50%	0	0%	0	0%
Wildlife Resources Commission	0	N/A	0	0%	0	N/A
<b>State Totals:</b>	<b>227</b>	<b>49%</b>	<b>154</b>	<b>44%</b>	<b>116</b>	<b>49%</b>

Appendix 3 (D)  
Estimated Cost to Implement Adequate Backup (High end)

Agency	2- Program Critical	3 - Department Critical	4 – Statewide Critical	
	*Note: Program Critical Total Dollars in each tier is calculated by multiplying the number of Program Critical applications in each tier by the high end of the range. Tier 4 uses \$100,001k to indicate the range is greater than \$100k.	*Note: Department Critical Total Dollars in each tier is calculated by multiplying the number of Department Critical applications in each tier by the high end of the range. Tier 4 uses \$100,001k to indicate the range is greater than \$100k.	*Note: Statewide Critical Total Dollars in each tier is calculated by multiplying the number of Statewide Critical applications in each tier by the high end of the range. Tier 4 uses \$100,001k to indicate the range is greater than \$100k.	Total \$\$\$
Administration, Department of	\$330,000	\$180,000	\$380,000	\$890,000
Administrative Hearings, Office of	\$0	\$0	\$0	\$0
Agriculture and Consumer Services, Department of	\$0	\$0	\$0	\$0
Alcoholic Beverage Control Commission	\$0	\$0	\$0	\$0
Auditor, Office of the State	\$0	\$250,000	\$0	\$250,000
Budget and Management, Office of State	\$0	\$0	\$0	\$0
Commerce, Department of	\$0	\$10,000	\$0	\$10,000
Controller, Office of the State	\$0	\$0	\$0	\$0
Correction, Department of	\$50,000	\$100,000	\$0	\$150,000
Crime Control and Public Safety, Department of	\$0	\$0	\$100,001	\$100,001
Cultural Resources, Department of	\$160,000	\$50,000	\$40,000	\$250,000
Employment Security Commission	\$0	\$0	\$0	\$0
Environment and Natural Resources, Department of	\$540,000	\$80,000	\$50,000	\$670,000
Health and Human Services, Department of	\$60,000	\$0	\$50,000	\$110,000
Industrial Commission - Workers' Compensation	\$0	\$0	\$60,000	\$60,000
Information Technology Services, Office of	\$0	\$30,000	\$60,000	\$90,000
Insurance, Department of	\$0	\$0	\$0	\$0
Justice, Department of	\$0	\$0	\$0	\$0
Juvenile Justice and Delinquency Prevention, Department of	\$0	\$0	\$0	\$0
Labor, Department of	\$0	\$300,000	\$0	\$300,000
North Carolina Community Colleges	\$0	\$0	\$0	\$0
Personnel, Office of State	\$0	\$0	\$0	\$0
Public Instruction, Department of	\$20,000	\$90,000	\$110,001	\$220,001
Revenue, Department of	\$320,003	\$450,004	\$0	\$770,007
Secretary of State, Department of the	\$0	\$0	\$0	\$0
State Board of Elections	\$0	\$0	\$0	\$0
Transportation, Department of	\$430,000	\$400,003	\$510,004	\$1,340,007
Treasurer, Department of the State	\$0	\$0	\$0	\$0
Wildlife Resources Commission	\$0	\$0	\$0	\$0
<b>State Totals:</b>	<b>\$1,910,003</b>	<b>\$1,940,007</b>	<b>\$1,360,006</b>	<b>\$5,210,016</b>

Appendix 3 (E)  
Estimated Cost to Implement Adequate Backup (Mid-point)

Agency	2- Program Critical	3 - Department Critical	4 – Statewide Critical	
	*Note: Program Critical Total Dollars in each tier is calculated by multiplying the number of Program Critical applications in each tier by the mid-point of the range. Tier 4 uses \$50,001k to indicate the range is greater than \$50k.	*Note: Department Critical Total Dollars in each tier is calculated by multiplying the number of Department Critical applications in each tier by the mid-point of the range. Tier 4 uses \$50,001k to indicate the range is greater than \$50k.	*Note: Statewide Critical Total Dollars in each tier is calculated by multiplying the number of Statewide Critical applications in each tier by the mid-point of the range. Tier 4 uses \$50,001k to indicate the range is greater than \$50k.	Total \$\$\$
Administration, Department of	\$165,000	\$90,000	\$190,000	\$445,000
Administrative Hearings, Office of	\$0	\$0	\$0	\$0
Agriculture and Consumer Services, Department of	\$0	\$0	\$0	\$0
Alcoholic Beverage Control Commission	\$0	\$0	\$0	\$0
Auditor, Office of the State	\$0	\$125,000	\$0	\$125,000
Budget and Management, Office of State	\$0	\$0	\$0	\$0
Commerce, Department of	\$0	\$5,000	\$0	\$5,000
Controller, Office of the State	\$0	\$0	\$0	\$0
Correction, Department of	\$25,000	\$50,000	\$0	\$75,000
Crime Control and Public Safety, Department of	\$0	\$0	\$50,001	\$50,001
Cultural Resources, Department of	\$80,000	\$25,000	\$20,000	\$125,000
Employment Security Commission	\$0	\$0	\$0	\$0
Environment and Natural Resources, Department of	\$270,000	\$40,000	\$25,000	\$335,000
Health and Human Services, Department of	\$30,000	\$0	\$25,000	\$55,000
Industrial Commission - Workers' Compensation	\$0	\$0	\$30,000	\$30,000
Information Technology Services, Office of	\$0	\$15,000	\$30,000	\$45,000
Insurance, Department of	\$0	\$0	\$0	\$0
Justice, Department of	\$0	\$0	\$0	\$0
Juvenile Justice and Delinquency Prevention, Department of	\$0	\$0	\$0	\$0
Labor, Department of	\$0	\$150,000	\$0	\$150,000
North Carolina Community Colleges	\$0	\$0	\$0	\$0
Personnel, Office of State	\$0	\$0	\$0	\$0
Public Instruction, Department of	\$10,000	\$45,000	\$55,001	\$110,001
Revenue, Department of	\$160,002	\$225,002	\$0	\$385,004
Secretary of State, Department of the	\$0	\$0	\$0	\$0
State Board of Elections	\$0	\$0	\$0	\$0
Transportation, Department of	\$215,000	\$200,002	\$255,002	\$670,004
Treasurer, Department of the State	\$0	\$0	\$0	\$0
Wildlife Resources Commission	\$0	\$0	\$0	\$0
<b>State Totals:</b>	<b>\$955,002</b>	<b>\$970,004</b>	<b>\$680,003</b>	<b>\$2,605,008</b>